Plasmas usually exhibit these properties:



1. Plasma shielding lengths of electric potentials usually are small when compared to plasma physical lengths

2. Number of particles within a $\frac{4}{3}\pi \lambda_D^3$ sphere usually are "statistically" large

$$N_D >>> 1$$

$$r = \lambda_D \longrightarrow Debye \ sphere$$

$$where \ \varphi(r) = \varphi_0 \ e^{-1}$$

3. Mean time between collisions usually are long when compared to typical plasma oscillations

